Applicant: Zhigang Qi et al. Attorney's Docket No.: 10964-065001 / 1081

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REMARKS

In response to the Office Action mailed December 3, 2007, Applicants amended claims 1, 4, 18, and 33, cancelled claims 2 and 3, and added new claims 40-42. Claims 1, 4-23, and 33-42 are presented for examination.

The Examiner objected to claim 2 under 37 C.F.R. § 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants have cancelled claim 2, so the objection should be withdrawn.

The Examiner rejected claims 1 and 2 under 35 U.S.C. § 102(a) as being anticipated by Inoue et al., WO 03/034519 using U.S. Patent Application Publication No. 2004/0241078 A1 as an English language equivalent ("Inoue"), and/or under 35 U.S.C. § 102(b) as being anticipated by Mussell et al., U.S. Patent No. 5,882,810 ("Mussell"), and/or under 35 U.S.C. § 102(b) as being anticipated by Colbow et al., U.S. Patent No. 6,153,323 ("Colbow"). Applicants do not concede that the previously pending version of claims 1 and 2 were anticipated by Inoue, Mussell, or Colbow. Nonetheless, Applicants cancelled claim 2 and amended claim 1 to require a sulfonic acid moiety covalently bonded to a fuel cell diffusion layer, where the sulfonic acid moiety includes an alkenyl moiety substituted with halogen. Neither Inoue, Mussell, nor Colbow discloses such subject matter. Applicants therefore request reconsideration and withdrawal of these rejections.

The Examiner rejected claims 1, 5, 6, 10, 11, 13, 18-22, and 33-39 under 35 U.S.C. §§ 102(a) and (e) as being anticipated by Menashi, U.S. Patent Application Publication No. 2003/0022055 A1 ("Menashi"). Applicants do not concede that the previously pending version of these claims were anticipated by Menashi. Nonetheless, Applicants amended claims 1, 5, 6, 10, 11, 13 to require a sulfonic acid moiety covalently bonded to a fuel cell diffusion layer, where the sulfonic acid moiety includes an alkenyl moiety substituted with halogen. Applicants also amended claims 18-22 to require a sulfonic acid moiety covalently bonded to a diffusion layer, where the sulfonic acid moiety includes an alkenyl moiety substituted with halogen. Applicants also amended claims 33-39 to require an acidic moiety covalently bonded to a fuel cell diffusion layer, where the acidic moiety includes an alkenyl moiety substituted with halogen.

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Menashi does not disclose such subject matter. Applicants therefore request reconsideration and withdrawal of these rejections.

The Examiner rejected claims 3, 4, and 12 under 35 U.S.C. § 103(a) as being unpatentable over Menashi in view of Gyoten et al. WO 99/66578 using U.S. Patent No. 6,746,793 as an English language equivalent ("Gyoten"). Applicants do not concede that the previously pending version of these claims were unpatentable over Menashi in view of Gyoten. Neither Menashi nor Gyoten, alone or in combination, discloses or renders obvious the subject matter covered by these claims, and there is no reason to combine these references to provide such subject matter. Further, even if the references were combined, the result would not be the subject matter covered by claims 3, 4, and 12. Nonetheless, Applicants have cancelled claim 3 and have amended claim 4 to require that R is alkenyl substituted with fluorine. Applicants have also amended claim 12 to require a sulfonic acid moiety covalently bonded to a fuel cell diffusion layer, where the sulfonic acid moiety includes an alkenyl moiety substituted with halogen. Neither Menashi nor Gyoten, alone or in combination, discloses or renders obvious such subject matter. Applicants therefore request reconsideration and withdrawal of these rejections.

The Examiner rejected claims 7-9 under 35 U.S.C. § 103(a) as being unpatentable over Menashi in view of Denton et al., EP 079174 ("Denton"). But, neither Menashi nor Denton, alone or in combination, discloses or renders obvious the subject matter covered by these claims, and there is no reason to combine these references to provide such subject matter. Further, even if the references were combined, the result would not be the subject matter covered by claims 7-9. Accordingly, Applicants request reconsideration and withdrawal of these rejections.

The Examiner rejected claims 14-17 under 35 U.S.C. § 103(a) as being unpatentable over Menashi. But, Menashi does not disclose or render obvious the subject matter covered by these claims. Thus, Applicants therefore request reconsideration and withdrawal of these rejections.

The Examiner rejected claim 23 under 35 U.S.C. § 103(a) as being obvious over Menashi in view of Reddy et al., U.S. Patent No. 5,132,193 ("Reddy"). But, neither Menashi nor Reddy, alone or in combination, discloses or renders obvious the subject matter covered by claim 23,

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and there is no reason to combine these references to provide such subject matter. Further, even if the references were combined, the result would not be the subject matter covered by claim 23. Hence, Applicants request reconsideration and withdrawal of this rejection.

Applicants have added new claims 40-42. New claim 40 requires an alkenyl moiety that includes a C_2 - C_{10} alkenyl, new claim 41 requires an alkenyl moiety that includes a C_2 - C_6 alkenyl, and new claim 42 requires an alkenyl moiety that includes a C_2 - C_3 alkenyl. Support for these new claims can be found at, e.g., page 8, line 11 of Applicant's specification. Applicants submit that new claims 40-42 partake of the novelty of claim 1 and are therefore allowable, for at least this reason.

For at least the foregoing reasons, independent claims 1, 18, and 33 are believed to be allowable.

Each of the dependent claims 4-17, 19-23, and 34-42 is also believed to define patentable features of the inventions. Each dependent claim partakes of the novelty of its corresponding independent claim, and for at least this reason, these claims are believed to be allowable.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants believe the application is in condition for allowance, which action is respectfully requested.

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Please apply any charges or credits to Deposit Account No. 06-1050, referencing attorney docket no. 10964-065001.

Respectfully submitted,

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